



DN 08/27/120

## DECLARATION

I, James Alton Lamm, residing at 1002 East Mildred Street, Bainbridge, GA, make the following declaration:

1. I have a Bachelor of Arts degree in General Studies with a Business Major from the University of Texas - Arlington and have been employed in the carpet and synthetic fibers, yarns and fabrics business since 1975. I am currently employed by American Fibers & Yarns, Inc. ("AF&Y"), Cummings, Georgia, as Research Specialist and have held that position since 1999. My responsibilities include development of new polypropylene fiber and yarn products and processes as well as investigation of current fiber and yarn product and processing problems. Before being employed by AF&Y, I was employed by Amoco Fabrics and Fibers Company (AFFC) of Austell, Georgia, from 1990 as Research Specialist and Pilot Plant Supervisor. My responsibilities for AFFC included development of new polypropylene fiber, yarn and fabric products and processes as well as day-to-day supervision of the AFFC fiber spinning pilot plant. AF&Y acquired the synthetic fibers and yarns business of AFFC in 1999. That business involves the manufacture and sale of polypropylene continuous filament yarns for end-uses such as residential, commercial and automotive carpet face yarns, manufacture and sale of polypropylene spun staple fiber yarns for end-uses such as apparel yarns and automotive applications and industrial fabrics. Before my employment with AFFC, Armstrong World Industries employed me as Research and Development Specialist. My responsibilities in that position included development and commercialization of residential and commercial carpet styles tufted with synthetic fibers and yarns.
2. Based on my education and employment experience, I consider myself a person at least ordinarily skilled in the art related to synthetic fibers and yarns, and particularly polypropylene fibers and yarns, including their manufacture and end-uses.
3. I am familiar with US Patent Application No. 08/928,156 of Bruce Bersted et al. and am familiar with bulked continuous filament yarns according to that patent application as a result of my employment with both AFFC and AF&Y, both of which have made and sold such yarns in their respective businesses. AF&Y is licensed under the patent application.
4. I understand that the US Patent and Trademark Office has considered the patent application unpatentable based on a 1989 published European Patent Application EP 0 330 212 A2 ("Wishman"). I have read Wishman and I understand that the claims of the patent application for polypropylene bulked continuous filament yarns with compressional recovery as determined by the Plug Crush Recovery test as described in the patent application of at least 85% are considered by a Patent Examiner as obvious to one of ordinary skill in the art from Wishman.

5. I do not agree that the claims of the patent application are obvious from Wishman. As one at least ordinarily skilled in the art, I understand Wishman to describe fibers that are crimped in a particular manner and then heat set, and which, in the form of short lengths of fiber known as "staple fibers," are said to be resilient and have improved compressional recovery. Staple fibers are not continuous filament yarns. Staple fibers can be used to make yarns, but those yarns are not continuous filament yarns.

6. That the resiliency and improved compressional recovery referred to in Wishman applies to staple fibers, but not continuous filament yarns or even staple fiber yarns, is readily evident from the description in Wishman. This is most evident from the Example of Wishman, which describes cutting a heat treated tow into staple about 3.25 inches long, and from the description of compressional recovery testing that appears in the paragraph bridging Columns 4-5 of Wishman, stating as follows:

The following is a description of the method used to determine compression recovery of staple fibers."

1. Card the sample to thoroughly blend and open it."

Persons ordinarily skilled in the art would understand that Wishman's test is not applicable to yarns because it refers specifically to "staple fibers" and because carding a sample to "thoroughly blend and open it" would destroy or alter yarn structure so much that whatever properties were measured in subsequent testing steps would not be properties of a yarn.

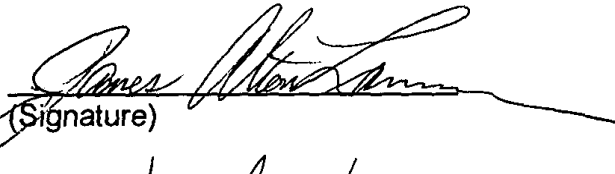
7. As a person at least ordinarily skilled in the synthetic fibers and yarns industry, I also find Wishman's description of resilience and compression recovery confusing and not descriptive or indicative of compressional recovery as determined by the Plug Crush Recovery. Wishman's compressional recovery test measures height of a bundle of fiber samples after 24 hours recovery from compression as a percentage of its height when compressed. Although Wishman reports compressional recoveries of at least 250%, the formula Wishman describes for determining those values cannot give values greater than 100%. This is seen from steps 6, 7, and 9 of the test described in the paragraph bridging Columns 4-5 of Wishman, stating that "Percent Compression Recovery =  $B - A/B \times 100$ ," with B equal to recovered height and A equal to an assumed compressed height of 0.167 inch. If percent recovery is calculated from  $B-A/B$ , it is readily evident that a value greater than 100% is not possible.

8. As a person at least ordinarily skilled in the synthetic fibers and yarns industry, based on my review of Wishman, I disagree that a polypropylene bulked continuous filament yarn with a Plug Crush Recovery of at least 85% is obvious. The compressional recovery and resilience of staple fibers described by

Wishman are not indicative of compressional recovery of bulked continuous filament yarns. In addition, the recovered height to compressed height comparison of Wishman's test method is not indicative of the recovered height to initial height comparison used in the Plug Crush Recovery test.

9. As a person at least ordinarily skilled in the synthetic fibers and yarns industry, I also disagree that a polypropylene bulked continuous filament yarn with a Plug Crush Recovery of at least 85% is obvious from Wishman because of comparative examples in the patent application. Wishman's heat treatment is described in the first four paragraphs of Column 4 and involves heating his crimped fiber at 280°F (= 138°C) or greater for time periods of 5 seconds to 8 minutes, depending on type of heating device and openness of his fiber bundle. Comparative examples 1-4 of the patent application all describe heating of polypropylene bulked continuous filament yarns at temperatures according to Wishman. Heating times in those comparative examples ranged from fractions of a second to 50 minutes, although none of the heating times in the comparative examples were within the specific range described in Wishman. Plug Crush Recoveries in all of those comparative examples were less than 85%. While I cannot compare those results directly to what might be attained according to Wishman due to the different heating times, as one at least ordinarily skilled in the synthetic fibers and yarns industry, from the results of those comparative examples I would not expect heating for the residence times described in Wishman to yield a polypropylene bulked continuous filament yarn with a Plug Crush Recovery of at least 85%.

I hereby declare that all statements made in this Declaration of my own knowledge are true and that all statements made on information and belief are believed by me to be true, and further that these statements are and were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 USC 1001 and that such willful false statements may jeopardize the validity of the patent application here under consideration and any patent issued thereon.

  
(Signature)

Name: JAMES ALTON LAMM  
(Printed or typed)

Date: 10/22/01

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage in an envelope addressed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231,

on or before 10-23-01

  
Legal Assistant

Date: 10-23-01